

Case Study Activity

Harmful Algal Bloom in Fairview

A harmful algal bloom has developed in Lake Greenspring, outside of the town of Fairview. The town is accustomed to some level of algae developing every summer, but this algal bloom is much worse than it has been in recent memory and has become a health threat. Typical lake activities are not safe to engage in, and we're not sure when they will be safe again.

In recent years, local, state, and federal government have poured money into this area to clean up legacy contamination and fertilizer that had been pouring into Lake Greenspring for years. These efforts have drawn people back to Lake Greenspring—there is a restaurant on the shores of the lake, a number of businesses that rent recreational equipment, a summer camp, many docks to fish from, and a dog park on a hill overlooking the lake. EPA believes that the main underlying cause of the bloom is run off from farming upstream of the lake combined with an unseasonably warm spring.

Local reporter Chris Lede has written multiple stories framing the situation as a failure by EPA and the state to effectively clean up the lake. He has also overhyped the danger of the water, asking whether it is just a matter of time until Fairview has brain-eating amoebas in their water supply (Lake Greenspring does NOT serve as a source of drinking water.) That being said, Chris' outlet, *The Fairview Chronicle*, serves as a central source of information for many in the community (via print and web stories, as well as social media), and engaging with Chris and *The Chronicle* could help disseminate meaningful, understandable, and actionable advice for locals.

Mayor Nickea Polis is heavily influenced by the business community and local sentiment, which is strongly against "big government" telling people how to live their lives and run their businesses. She is also unwilling to point the finger at runoff from agriculture as she has received campaign contributions from many of the prominent farming interests in the region. The people of Fairview generally like the farming community—they contribute fresh vegetables and fruit to the local schools and many people have family that work or own a farm in town. Mayor Nickea does not want to put her townspeople at risk, but she feels she needs to be seen as being supportive to the business community, especially with a potentially difficult election coming up this fall. She really just needs this issue to go away as soon as possible.

Fairview resident and community activist Taylor Trout is not happy with EPA. They serve on the board of the local nonprofit *Fish For All*, a group that supports and represents the interests of Indigenous cultural and subsistence fishers in the area, especially Lake Greenspring. The HAB has had outsize impact on the communities they serve, and with few signs of the bloom abating, many have returned to fish in the lake,

despite warnings from the state's Department of Environmental Protection and a fish advisory from EPA. Taylor knows that much more needs to be done to support these anglers since many face the choice of their families eating contaminated seafood or going hungry. They want EPA to take much more aggressive action to help these folks through the current event and to prevent HABs from happening again in the future.

Local business owner Dawn Starboard runs Paddler's Delight, a canoe and kayak rental on the shores of Lake Greenspring. This is a second generation, family-owned business whose seasonal tourism income is based solely on the use of this lake, as there are no other suitable waterways for recreation with boat docks nearby. She is becoming deeply concerned that the bloom will cut into the brief season where her business makes enough money to sustain them during the rest of the year. Dawn also has a contentious relationship with users of the dog park because pet owners often let their dogs swim in the lake after playing in the park and don't clean up the waste they leave behind. She's convinced that animal waste has caused this issue and wants to see the dog park closed. Dawn needs clear information about the root causes of harmful algal blooms. If HABs on the lake are truly out of control, no one will even want to use the lake, so minimizing the issue will not help her business and it will risk her health and the health of her customers in the meantime.